#### BEFORE THE ENVIRONMENT COURT

Decision No. [2010] NZEnvC 403

IN THE MATTER of appeals under Section 120 of the

Resource Management Act 1991

BETWEEN DIRECTOR-GENERAL OF

CONSERVATION (NELSON-

MARLBOROUGH CONSERVANCY)

(ENV-2007-CHC-000162) (ENV-2008-000128)

NEW ZEALAND AND NELSON MARLBOROUGH FISH & GAME

COUNCILS

(ENV-2007-CHC-000166)

ORMOND AQUACULTURE LIMITED & NEW ZEALAND CLEARWATER CRAYFISH (KOURA) LIMITED

(ENV-2007-CHC-000167)

TRUSTPOWER LIMITED (ENV-2008-CHC-000217)

SAVE THE WAIRAU INCORPORATED

(ENV-2008-CHC-000222)

JET BOATING NEW ZEALAND

INCORPORATED

(ENV-2008-CHC-000223)

Appellants

AND MARLBOROUGH DISTRICT

COUNCIL

Respondent

Hearing at: Blenheim on 2-5, 9-13, 23-26 November 2009, 30 November -4

December 2009, 7 – 11 December 2009, 8 – 12 February 2010, 10 – 14

May 2010

Court: Environment Judge R G Whiting

Environment Commissioner A J Sutherland Environment Commissioner J R Mills

Environment Commissioner H M Beaumont



Counsel:

Mr C N Whata and Ms C N Sheard for TrustPower Limited

Ms M Radich, Mr P Radich and Mr J Maassen for Marlborough

District Council

Ms M A Baker for New Zealand and Nelson-Marlborough Fish &

Game Councils

Mr M Hardy-Jones for save the Wairau River Incorporated and Jet

Boating New Zealand Incorporated

Mr D J Clark for J & J McLauchlan (s 274 party)

Ms A J Parr for self (s 274 party)

Ms P Doyle for self (s 274 party)

Mr S Browning for Green Party Kaikoura Electorate Branch (s 274

party)

Date of

Decision:

## DECISION OF THE ENVIRONMENT COURT

- A. The appeal of TrustPower is allowed to the extent that the decision of the Marlborough District Council is upheld save for the amendments to the conditions of consent as contained in Appendix 2.
- B. The remaining appeals are dismissed save for the amendments to the conditions of consent as contained in Appendix 2.
- C. Because of the complexities of the conditions of consent the Marlborough District council is given 30 days to apply for the correction of any errors.



# TABLE OF CONTENTS

DECISION OF THE ENVIRONMENT COURT	
1 BACKGROUND	
1,1 Introduction	
1.2 Applications and Council decision	7
1.3 The hearing	
2 LEGAL MATTERS	
2.1 Preliminary legal issue – futility	
2.1.1 The evidence before us	14
2.1.2 Property rights and the Resource Management Act	15
2.1.3 Futility	16
2.2 Legal basis for decision	17
2.2.1 The Act	17
2.2.2 Part 2 of the Act	18
2.2.3 The relevant plans	19
2.3 The statutory instruments	
2.3.1 Regional Policy Statement	20
2.3.2 The Wairau/Awatere Resource Management Plan	
2.3.2.1 Natural Character – Chapter 10	21
2.3.2.2 Landscape - Chapter 5	
2.3.2.3 Flora, Fauna and their Habitat – Chapter 4	24
2.3.2.4 Freshwater – Chapter 6	
2.3.3 Section 69 of the Act and reasonable mixing	
2.3.4 The triple class system and flow-sharing regime	
2.3.4.1 The activity classification	35
2.3.4.2 The Sustainable Flow Regime.	
2.3.4.3 The triple class system	
2.3.4.5 Interpretation of Rule 27.1.1.2.1	30
3 PHYSICAL CONTEXT, THE EXISTING ENVIRONMENT AND PERMITTED BASELIN	TE 40
3.1 General Description	
3.1.1 River control works	
3.1.2 Morphology	
3.1.3 The tributaries	
3.1.4 Water quality	
3.1.5 Aquatic ecology	
3.1.6 Avifauna	
3.1.7 Wetlands and the terrestrial environment	
3.1.8 Landscape and natural character	
3.1.9 Recreation	
3.2 Existing abstractions from the Wairau River	
3.3 The Branch Scheme	
3.4 Existing hydrology of the Wairau River	
3.5 The permitted baseline and its relevance	
	ال
4.1 Overview	
4.2 The intake	
4.2.1 Physical description	
4.2.2 Operation	
4.2.3 Regulation pond	
4.3 Canals	
4.4 Tributary and road crossings	
4.5 Power stations	
4.6 Tail races	
4.7 Non-engineering works	
THE CONTESTED ISSUES	
§.1 Positive effects	6:

5.2 Adverse effects	
Group 1 effects	
Group 2 effects	
6 ENVIRONMENTAL EFFECTS	
6.1 Undisputed positive effects	66
6.2 Disputed economic and social benefits	67
6.2.1 Supply of renewable electricity generation	67
6.2.2 Impact on carbon emissions	68
6.2.3 Security of electricity supply	
6.3 Disputed Group 1 effects	69
6.3.1 Hydrology	69
6.3.2 Flow management	70
6.3.3 Discharges from the scheme	
6.3.3.1 The discharge from PS5 at Marchburn	
6.3.3.2 Operational and emergency discharges from canals	72
	7
	74 74
6.3.4.2 Changes downstream of Marchburn	70
6.3.4.3 Connectivity issues	/8
6.3.4.4 Comparison with SFR	79
6.3.5 Sediment transport regime	
6.3.5.1 Sediment transport in the affected reach	
6.3,5.2 Flushing regime and effects	
6.3.6 In-river works	86
6.3.7 Interaction with groundwater	
6.3.7.1 During construction	
6.3.7.2 During operation	87
6.3.7.3 Maintenance of water supplies	88
6.3.7.4 Effect of reduced river flows	89
6.3.8 Overall findings on hydrology	
6.4 Water Quality	90
6.4.1 Temperature	
6.4.2 Turbidity and sediment	
6.5 Aquatic ecology	
6.5.1 Position of the parties	92
6.5.2 Habitat modelling to assess ecological effects	92
6.5.2.1 The hydraulic model	94
6.5.2.2 Model design and calibration	92
6.5.2.3 Verification	
6.5.2.4 Habitat modelling.	
6.5.2.5 Findings on the habitat modelling	95 oc
6.5.3 Periphyton and didymo	
Discussion and findings	
6.5.4 Macro-invertebrates	
Discussion and findings	106
6.5.5 Trout and salmon	
Discussion and findings	
6.5.6 Native fish	
6.5.7 Fish screening	
Discussion and findings	113
6.5.8 Downstream flow fluctuations	
6.6 River birds	114
6.6.1 Food sources for the tern	11
6.6.2 Nesting habitat for the tern	
6.6.3 Predators and the tern population	
6.6.4 Mean river flow and number of terns	
Findings	
6.6.5 Proposed conditions for predator control	
6.6.6 Overall findings on river birds	
4 6.7 Riparian vegetation, wetlands and game birds	12
Findings	13
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10



6.8 Native bush and shrubland	
Discussion and findings	133
6.9 Proposed conditions and ecological findings	
6.9.1 Overall findings on ecology	133
6.9.2 The flow regime as proposed	
6.9.3 Comparison with SFR scenarios	
6.9.4 Performance standards	
6.9.5 The triggers	138
6.10 Natural character, landscape and amenity	140
6.10.1 Evaluation of natural character	149
6.10.1.1 The quantum of the abstraction and the length of the diversion reach	151
6.10.1.2 The character of the abstraction	152
Findings	152
6.10.2 Landscape and visual amenity	153
Findings	155
6.10.2.1 Amenity impacts on the Parr/Rogers, McLauchlan and Doyle properties	156
6.10.2.2 Effects on the amenity of Ms Doyle	157
Finding on amenity effects on individual landowners	157
6.11 Recreation	
6.11.1 Importance of the fishery	158
6.11.2 Angling amenity	160
Evaluation	160
6.12 Disputed Group 2 effects - health and safety	161
6.12.1 Dust and air quality	161
6.12.2 Seismic matters	164
7 COST/BENEFIT ANALYSIS AND ALTERNATIVES	167
7.1 Alternatives	160
8 STATUTORY TESTS	1774
8.1 Section 104(D) Gateways	174
8.1.1 First gateway – adverse effects	174
8.1.2 Second gateway – objectives and policies of the Plan	174
8.2 Consideration against the provisions of the Plan	1/3
	1/0
Objective 6.2.1.1 - Life-supporting capacity of the resource	176
Objective 6.2.1.2 - Maintaining and enhancing water quality	179
Objective 6.3.1.1 - Equitable allocation and use	
Objective 6.5.1.1 - Sustainable and equitable allocation during low flow	180
8.2.2 Chapter 4 - Flora, Fauna and their Habitats	180
Objective 4.2.2.1 - Significant vegetation and habitat	181
Objective 4.3.2.1 - Freshwater and riparian ecosystems	181
8.2.3 Chapter 10 - Natural Character	182
9 SECTION 104 MATTERS	183
9.1 Introduction	183
9.2 Effects on the environment	184
9.3 Relevant provisions of the Plan	186
9.4 Part 2 of the Act	186
10 EXERCISE OF DISCRETION	188
11 DETERMINATION	190



nation, the value of the net non-quantified impacts on the environment would have to be negative and greater than the net quantified benefits. For example, based on the preferred Method 3 – National General Costs Avoided, net negative impacts on the environment would have to exceed \$475M.

[678] We accept the findings of Mr Donnelly, subject to recognising the limitations of the three valuation methods employed. His assessment gives us an indication as to the economic efficiency of the scheme from both a national and regional perspective.

[679] In so finding we are mindful of and adopt the caveat of the Environment Court in Lower Waitaki River Management Society Incorporated v Canterbury Regional Council: 520

Finally, there are two other points to note about section 7(b) of the RMA. First costs benefit analysis and economic efficiency under the RMA do not determine resource allocation decisions. That is consistent with economic theory which recognises that cost benefit analysis provides information and organizes that information, enabling it to be placed alongside other decision-making criteria in a useful manner.

### 7.1 Alternatives

[680] The Green Party – Kaikoura Electorate Branch in their closing submissions, presented by Mr Browning, submitted that there is an onus on TrustPower to properly explore the options of alternative methods of producing electricity when considering the use of the Wairau River as a resource in energy generation.

[681] Mr Shearer, a long-standing member of the Green Party, gave evidence to support this contention. It was Mr Shearer's opinion, that there is no need for the output of the scheme or the need could be totally avoided by a combination of:

- [a] Increased energy conservation through better household design and insulation, more efficient lighting, the adoption of improved appliances and electric motors;
- [b] Increased use of small-scale distributed generation and energy sources such as solar water heaters, micro-wind generators, photovoltaic cells,



domestic bio-energy (i.e. wood and pallet burners), and micro-hydro stations; and

[c] The adoption of marine generation technologies.

[682] There was argument as to the need for a cost/benefit analysis with respect to alternatives. The cost/benefit analysis provided by Mr Donnelly was restricted to considering the proposal against the status quo — in other words, the alternatives are between the proposal or doing nothing. It is accepted that from an economic efficiency perspective, least cost requires consideration of alternatives and that this includes alternative ways of achieving the same objective, as well as the alternative of doing nothing. The issue before us is whether, from a resource management perspective, the consideration of alternatives and the use of cost/benefit assessment needs to incorporate all credible alternatives to the proposal.

[683] Mr Browning, for the Green Party, relied on the following passage from Lower Waitaki: 521

We conclude that the role of a consent authority, when having particular regard to Section 7(b), is, where possible, to internalise the effects of a proposal, so that the cost of the externalities are imposed on the consent holder. It is then left to that person to decide whether their proposal can compete against others in the market. Consequently it is not usually necessary to consider alternative uses of the resource in question, or the use of alternative resource to obtain a similar benefit. However there are at least three exceptions:

- (1) where the costs cannot be fully internalised to the consent holder;
- where there is no competitive market (e.g. in congestion on roads where the relevant resource is the land near those roads; we also note there is a very limited market in water permits); or
- (3) where there is a matter of national importance in Part 2 of the Act involved and the cost benefit analysis requires comparing measured and unmeasured benefits and costs (as is usually the case) so that the consent authority has to rely principally on its qualitative assessment, e.g. TV3 Network Services Limited v Waikato District Council. 522

[684] Mr Whata submitted that the statement of the Environment Court quoted above was wrong and contrary to *Brown v Dunedin City Council*. We do not accept that submission. *Brown* was considering a different point, namely the consideration of

<sup>523</sup> [2003] NZRMA420 at [16]



<sup>521</sup> C80/2009 at [201]

<sup>&</sup>lt;sup>522</sup> [1997] NZRMA539; [1998] 1NZLR360 (HC)

different methods under s 32 of the Act – methods referring to the methodologies that could be used in a proposed plan. However, we can find no statutory foundation for the three exceptions, nor were we referred to any.

[685] There is no direct statutory direction requiring us to consider alternative locations or methods in a s 120 appeal. Section 88(2)(b) of the Act requires a person applying for a resource consent to include, in accordance with Schedule 4, an assessment of environmental effects in such detail as corresponds with the scale and significance of the effects that the activity may have on the environment. Subsection (3) provides that if an application does not include an adequate assessment of environmental effects, the local authority may, within 5 working days after the application was first lodged, determine that the application is incomplete and return the application, with written reasons for the determination, to the applicant. Section 92(1) of the Act authorises a consent authority to request further information that may include the consideration of alternatives in accordance with Schedule 4.

### [686] Schedule 4 includes the following:

...

 Matters that should be included in an assessment of effects on the environment

Subject to the provisions of any policy statement or plan, an assessment of effects on the environment for the purposes of section 88 should include—

(b) where it is likely that an activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:

[687] There are other provisions in the Act that require consent authorities to consider alternatives but these are specific to circumstances that are not applicable here.<sup>524</sup> There is a strong policy direction in the Act that alternatives should be a part of the overall assessment of the effects of a proposed activity, when the threshold of significant adverse effects is reached.

[688] We are of course bound by the High Court decision of TV3 Network Services Limited. In our view its principle is simple and straight-forward. Where a proposal

<sup>&</sup>lt;sup>524</sup> See sections 105(1)(c) and 107A(2) (f)



would result in significant adverse effects on matters of national importance, alternative locations or methods may need to be considered.

[689] In Maniototo Environmental Society Incorporated v Central Otago District Council, 525 the Environment Court held that it is possible that alternatives should also be considered in cases where significant environmental effects are present (other than that they involve matters of national importance). However, the Court did not go so far as to decide this issue.

[690] It seems to us that whether alternatives should be considered depends firstly on a finding of fact as to whether or not there are significant adverse effects on the environment. If there are significant adverse effects on the environment, particularly if they involve matters of national importance, it is a question of fact in each case as to whether or not an applicant should be required to look at alternatives, and the extent to which such an enquiry, including the undertaking of a cost/benefit analysis, should be carried out.

[691] We are mindful of what the Environment Court raised in Waiareka Valley Preservation Society Incorporated & Ors v Waitaki District Council & Anor: 526

[316] As the Planning Tribunal noted in *Transpower New Zealand Limited v Rodney District Council*<sup>527</sup>; there ought to be some limit to what is raised in terms of alternative locations and methods, though it is difficult, except in extreme cases, to prescribe that limit in advance. The Tribunal also held that in the circumstances of significant adverse effects it would be open to opponents of the proposal to test (and we presume for the Court to make findings on) the adequacy of the applicant's consideration of alternative locations and methods.

[692] The consideration of alternatives in an assessment of effects on the environment is a broad concept. It includes alternative locations and methods of generation, or methods to avoid the need for generation, as outlined by Mr Shearer. However, it also encompasses variations to the proposal in terms of the scale, geographic extent, or mode of operation in order to address particular environmental concerns.

[693] TrustPower has considered alternatives and presented its preferred layout and operation by way of the technical specifications for the construction and operation of the

f(t)

SEAL OF 77 A56/1994

scheme as well as the proposed conditions of consent, particularly those addressing the flow regime in the river. Mr Lilley described the initial scoping process and an early decision to reduce the output of the scheme in order to provide a higher minimum residual flow in the river (from 6 to 10m<sup>3</sup>/s). The subsequent engineering feasibility study and assessment of environmental effects were conducted in parallel to identify both engineering and environmental constraints and make adjustments to the scheme design. 528

[694] Mr Lilley outlined the consideration of alternative generation options in the region including hydro-generation on the upper Wairau River (between Dip Flat and The Wash bridge), the lower Wairau River (between The Wash bridge and the Narrows) with a dam, an enhanced Branch Scheme, hydro-generation on the Clarence River and options for wind farms. 529.

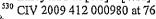
[695] Clearly TrustPower has considered a broad range of alternatives as part of its scoping for this project and assessment of effects on the environment. While it has not undertaken a detailed CBA assessment of each of these alternatives we do not think that such an assessment is always necessary or even appropriate. It is entirely open to TrustPower to consider the merits of these alternatives using other decision making criteria.

[696] We also acknowledge that the alternative methods proposed by Mr Shearer in his evidence, are not within the capacity of TrustPower to arrange. This raises problematic practicalities. Indeed, if we were to embark on intensive analysis between TrustPower's proposal and various alternative options and methods proposed by Mr Shearer, we would be entering into the field of central planning, which is neither TrustPower's responsibility as an applicant nor our function as a Court.

[697] We consider that TrustPower has properly considered alternatives as part of its assessment of environmental effects. We do not agree with the Green Party submission that a CBA assessment of all potential alternative generation options is required.

[698] Since writing this part of the decision the judgment of the full High Court in Meridian Energy Limited and Ors v Otago Regional Council<sup>530</sup> has been released. It has

<sup>&</sup>lt;sup>529</sup> Lilley EIC at [4.1] – [4.11]



<sup>&</sup>lt;sup>528</sup> Lilley EIC at [4.27] – [4.37]

held that the three imperatives set out in the extract from the Lower Waitaki, relied upon by the Green Party are erroneous in law. On our reading of the High Court judgment we see no reason to amend what we have written.

#### 8 STATUTORY TESTS

[699] In considering the statutory tests we consider the proposed scheme subject to the amended proposed conditions of consent as set out in Appendix 2.

### 8.1 Section 104(D) Gateways

### 8.1.1 First gateway - adverse effects

[700] The first gateway test requires us to consider the effects of the proposed scheme on the environment. We must be satisfied that the effects of the proposed scheme on the environment will be minor. Mr Whata, relying on the authority of Bayley v Manukau City Council<sup>531</sup> submitted that in considering this gateway we should have regard to positive effects that offset adverse effects. That case, of course, was not concerned with the gateway tests, but to the notification procedures under s 94 of the Act as it then was.

[701] There have been a number of conflicting decisions of the Environment Court as to whether the Court should consider the positive effects of a proposal when deciding whether the threshold test has been met. We prefer the reasoning set out in *Stokes v Christchurch City Council*<sup>532</sup> where the Court said:

... The Court of Appeal's decision in *Bayley* must cast doubts on transferring the Elderslie Park approach to s 105(2A) as this division of the Court did in *Baker Boys* (with qualifications). Especially since we have to consider the 'adverse effects' (plural) we consider that while it is still appropriate to consider each adverse effect as mitigated, there is no statutory authority for us to consider the positive effects of a proposal when deciding whether the threshold test in s 105(2A)(a) is met. To that extent we consider that in the light of *Bayley*, we were wrong in *Baker Boys* in adopting a (qualified) net adverse effect approach to the first threshold test. The test is whether the adverse effects as proposed to be remedied and/or mitigated, and taken as a whole are more than minor.

[702] Stokes has been followed in a number of Environment Court decisions including:

